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MONTHLY REPORT

1 December - 31 December 1958

SYSTEMS ENGINEERING BRANCH
ENGINEERING STAFF

25X1A9A



25X1A

2. [] did not accept the OL Real Estate and Construction Division's approval of one additional 100 KW Diesel generator for the [] receiving site and, instead, requested the shipment of a 200 KW unit. The problem is now in the hands of RE&CD and they have queried [] by cable asking for a further justification.

25X1A6D

25X1A

3. Procurement action was initiated for the [] Selective Calling equipment which is to be used to provide an alarm feature for a two way radio-telephone system requested []. We have received word, however, that there is a change in the requirement and procurement is being held up pending the arrival of a [] representative who will be on TDY at Headquarters in early January and will further define the requirement.

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25X1A

25X1A

4. Work continues on the redesign of the Tiny Tot for use with the Teletape System. In order to utilize the standard 8-inch key tape reel mounted on the cover of the encipher TD it will be necessary to provide a reperforator shelf that stands approximately 2 inches higher than existing shelves so that, when installed over the encipher TD, there will be sufficient room for the key tape container. Six of these new shelves are being built [].

25X1A5A1

5. A visit was made to the [] to negotiate for the procurement of approximately \$260,000 worth of teletype equipment and to discuss our request for a quotation covering the development of an all mechanical tape combiner/printer. A trip report is attached.

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6. A chart outlining the characteristics of the UHF multiplex equipment investigated in conjunction with Project [] was prepared and added to the existing study on VHF-UHF multiplex equipment. 25X1A6D

25X1A6A

7. At the request of OC-ED, an R.F. antenna/equipment patch panel is being designed for the [] radio station. The patch panel will be fabricated at Headquarters and shipped to the [] communicator during February 1959. 25X1A6A

8. An investigation was started to determine the cause of audio noise in the KL-7 and possible methods of reducing it. It was found that the major source of noise was caused by the print arm hitting against the print magnet solenoid. A G.R. 1551-A Sound Level Meter is being used in order to make more accurate sound level readings to determine the amount of noise generated by various components of the KL-7.

25X1A5A1

9. During this reporting period a conference was held with []. Agency requirements for four different LP antennas were discussed. These include a 55-600 mc pouchable, indoor antenna; a 30-600 mc collapsable outdoor antenna and a 60-600 mc steel parabolic with an attached rim mounted 600-1000 mc parabolic with 360° azimuth and 90° elevation control, both remotely operated. A prototype of the 55-600 mc antenna has already been received and is now being evaluated by R&D. A proposal for an additional 5 each 55-600 mc antennas and 5 each 30-600 mc antennas has been received and is now being studied. [] was also requested to send us a quotation for supplying and installing two receiving and one transmitting Logarithmic Periodic antennas. These cover from 6.5 to 60 megacycles and will be installed []. They will be mounted on self-supporting masts, will be rotatable through 360° and controlled from within the station. 25X1A6D

25X1A5A1

10. The Drafting Unit has prepared 66 drawings of which 4 were forwarded to two field stations as part of BYBECI.

11. NEW PROJECTS

25X1

25X1A6A

E-5117 - [] Space Requirements
E-5149 - [] Communications Facilities

12. SUSPENDED PROJECTS

25X1A2D2

E-5350 - []
E-5140 - Model 231-D Transmitter Pre-emphasis and Speech Clipping Modification

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13. INACTIVE PROJECTS

25X1A6A E-5085 - Communications Systems Planning, New Building
E-5112 - [] Base Radio Station
25X1A6A E-5080 - Mobile Message Center
E-5126 - []

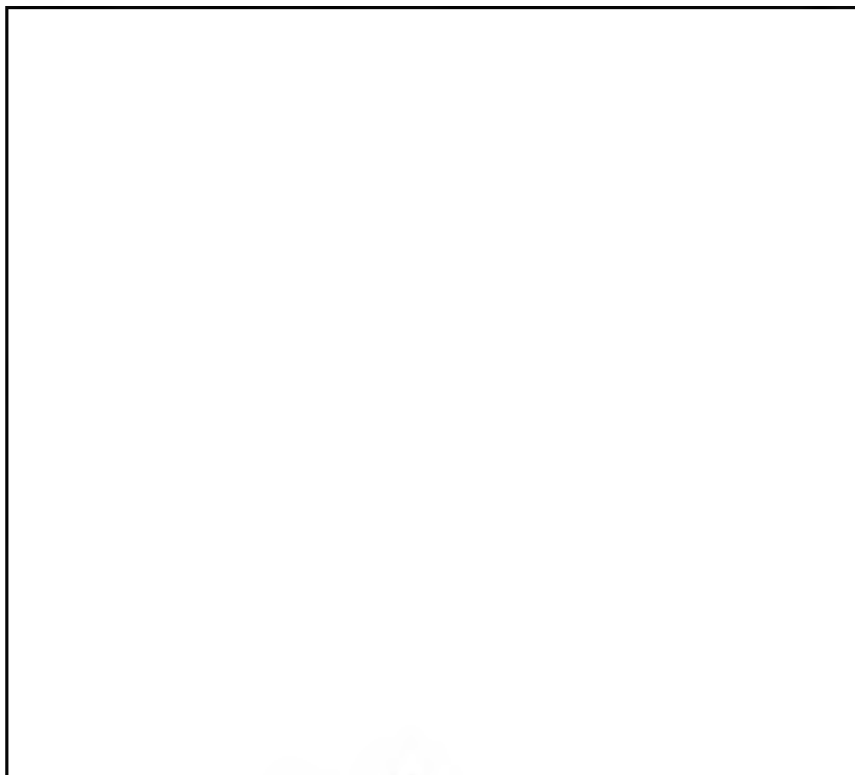
14. COMPLETED PROJECTS

E-5147 - Receiving Antenna Patch Panel

15. ADMINISTRATIVE

TDY

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10 November

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SUBMITTED BY: []

Chief, Systems Engineering Branch, OC-E

Attachments:
(Listed on the next Page)

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ATTACHMENTS:

1. [REDACTED]
2. Memorandum to the File, SUBJECT: Report of Trip to Detroit, Mich.,
and Mankato, Minn. 25X1A5A1
3. Memorandum for the File, SUBJECT: Report of Trip to [REDACTED]
4. Memorandum to the File, SUBJECT: Meeting with [REDACTED]
to discuss possible further miniaturization of the CPC-2 Trans-
mitter-Receiver combination. 25X1A5A1
25X1A6A
5. Memorandum for the File, SUBJECT: Trip Report to [REDACTED]
6. Memorandum to the File, SUBJECT: Trip Report on Engineering Survey of
New Station Sites [REDACTED] 25X1A6A
7. Memorandum to the File, SUBJECT: Engineering Survey for the New
Station Installation [REDACTED] 25X1A6A
8. Memorandum to the File, SUBJECT: Trip Report - [REDACTED]
9. Projects and Activities of the December Monthly Report 25X1A6A